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XIII.—Ornithological Results of a Naturalist's Visit to the Coast-region of South Guyana. By Dr. EMIL A. GOELDI, C.M.Z.S., Director of the Museum in Pará.

LEAVING Pará during the night of the 7th of October, 1895, we began, on board the small steamer 'Adjudante,' of the Amazon Steam Navigation Company, our journey to Guyana, favoured by very fine weather. The outside-route along Marajó and the Atlantic coast being at the same time disagreeable and dangerous, we sailed on the inside-way around this large island, passing through the celebrated "Channels of Breves," with their charming vegetation, which struck my countryman Louis Agassiz in 1865 with such admiration. During the following days nothing was observed, from the ornithological standpoint, that deserves especial attention, except, perhaps, some fine specimeus of Urubitinga schistacea, circling above the shore-forests of the delightful "furos" (channels), and a small flight of Nauclerus furcatus playing in the air near the island-group called São Salvador. One can hardly be tired of observing the elegant evolutions of this really masterly flier.

Early on the morning of the 11th we arrived in sight of the coast of Guyana, near the mouth of the river Counaný. Approaching the shore we saw before us an interminable

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forest of moderate height and transparent branches and foliage—the "siriubál" (Avicennia) forest, very characteristic of the littoral landscape of Lower Amazonia and Guyana. A large number of white and moving points in the wide mud-zone which girdled the shore-forest—we had just arrived at low-water-time, and had therefore to cruise in front of the mouth of the river—were soon recognized as formed by rows of small white Herons (Ardea candidissima). Entering at length into the river, our steamer stopped, after somewhat difficult navigation, for an hour and a half at a place called "Igarapé da Roça," in sight of the first cascade, which intercepts a free navigation of the upper course of the Counaný River. Waiting for boats during the greater part of the day, we had sufficient time to get acquainted with the general bird-life of the surrounding river-landscape.

On the left side, upon one of the before-mentioned siriúbatrees, we perceived the continuous going and coming of a couple of the elegant and audacious Ictinia plumbea, and soon discovered the nest in a fork of a tree, perhaps some 20 mètres above water-level. Though the tree was big, we cut it down, and after an hour's labour we had not only the nest, with a young bird, but also one of the parents. The nest is a badlyformed structure of single sticks. The young was still entirely in the down, of white colour, and had a grevishbrown iris, whereas the old one, as known, has a very beautiful cherry-coloured iris. This chick was supposed to be about a week old. It was the first time I ever met with the nest of this fine bird of prey, and if, as it seems, Schomburgk's "vague informations" ('British Guiana,' iii. p. 735) are the only authority upon the nesting of Ictinia, very few ornithologists must have seen it. The eggs, I believe, remain still unknown.

Some time afterwards we observed a small Swallow several times entering a hole in a tree-stump which stood in the stream. I easily recognized it to be *Tachycineta albiventris*. The hole had certainly been made by some small Woodpecker, and was now occupied by the graceful Swallow, with his glittering greenish back, for breeding purposes. I had no



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opportunity of making a thorough examination of the stump\*.

A shrub laden with half-a-dozen hanging bag-nests, only a few steps distant from our steamer, was the animated place of exercise for a colony of *Cassicus persicus*. They were also breeding at this time. I got several eggs from the nests, and among them some slightly different in colour and shape, which evidently belonged to another species with Cuckoo-like habits. I shall return to this subject on a future occasion.

The Macaws are certainly some of the most brilliant figures of the Equatorial forests of South America, and it will be easily understood that we were surprised to find here, on the coast of Guyana, one of the rarest species, the blue Arára (Ara hyacinthina), under circumstances which allow us to call it quite a common bird in these regions. In a few hours we noted several dozens passing over our steamer. On one occasion we saw eight individuals, forming four couples, together at one time. The natives, without exception Brazilians of the State of Pará (at least along the Counany and the northern coast-region), spoke of the blue Arára, which is rather a scarce species in zoological gardens, as a bird of migration (" passaro de arribação "), common in the dry season and absent during certain months. Soon afterwards I had occasion to convince myself personally that Ara hyacinthina was really breeding at this season in the coast-zone of Southern Guyana.

What we saw in a few hours on the Lower Counaný was, indeed, sufficient to increase our hopes of interesting ornithological results during a few weeks' residence in the higher regions of the river. With the next tide we arrived in the same night at the village of Counaný, charmingly situated

\* The nesting and breeding of this Swallow have been observed by Prince Max. zu Wied on the coast between Bahia and Rio [*Hirundo leucoptera*, Beitr. iii. p. 364], and more recently by E. Bartlett on the Ucayali River (Sharpe and Wyatt, 'Monograph of the Hirundinidæ,' text, page 139). The particulars seem to be the same as those observed by me.

on a granitic hill on the right hand of the stream, which measures here  $43\frac{1}{2}$  m. in breadth, and is bordered by elegant assahý-palms, tabócas (bamboo), and anhingas (Montrichardia), the favourite food of the Hoatzin.

In this village we took up our headquarters for a fortnight. Numerous trips were made on every side. We visited alike the forests and "capoairas" (old plantations) behind the village, the savannas beginning some miles distant on the right and left hand of the stream, and the forests on the river above and below. To ornithology principal attention was paid by the zoologists of our small expedition. I think that my readers will agree with me that a chronological order will perhaps be the best way to give a summary idea of our work and results in Counaný. At the same time it may be of advantage to compare the features of the ornis of South Guyana with those of the ornis of Pará and its neighbourhood.

On the 12th October (the day of our arrival), naturally enough, scientific work could not begin at once. But we obtained during an afternoon walk along the river-border specimens of *Tachycineta albiventris* and of a Heron (*Ardea virescens*), the former usually seen sitting on the posts and trees in the water, the latter occupied in the mud between the boats in the harbour.

The next morning we visited the forest between the main river and its tributary, the Igarapé de Hollanda. I heard and observed different Pipridæ, called "Arapará," as in Pará, especially Chiromachæris gutturosa, several small Thamnophili, and a Thrush, to judge by its song, the same species as in Pará, the common "Caranué" (Turdus albiventris). Several small flights of blue Aráras were pursued without result; they always had the opportunity of discovering us before we could see them on some of the highest trees, where they were evidently occupied on the fruits. From a companion I got a nice specimen of Harpagus bidentatus, three of Columba speciosa ("Troeál"), and two of the splendid Galbula viridis, the first I had seen of this species. From another of our company, who returned from a walk down to the Igarapé da Roça, I obtained three young individuals of a small Plover, two of *Tachycineta albiventris*, and one of *Atticora fasciata*. This lovely minute Swallow I had also never seen before alive, but I recognized it easily, as I remembered the description and figure in Sharpe and Wyatt's 'Monograph of the Hirundinidæ.' Night-Herons and Sun-Bitterns (*Eurypyga helias*) were observed, and the smaller "Anú" (*Crotophaga ani*) was everywhere heard in the tabócas and gardens behind the village. A boy brought us four eggs of *Cassicus persicus*.

Another forest, situated rather more in a westerly direction from the village of Counany, was visited on the 14th October. Here, in a few minutes, we had discovered a fruittree, where we noticed a continuous coming and going of many good birds, small and large. Soon we shot Rhamphastos erythrorhynchus, the large "Tucano de peito branco"; two individuals of Monasa nigra, the "Tangurú-pará"; a Woodpecker new for us, Celeus elegans, similar to the Pará form, C. jumana; Tityra cayana, and a vellow-breasted "Surucuá" (Trogon), this latter unfortunately in a bad state. On returning home I had the great pleasure of meeting with an uncommon Formicarian, of a slaty black, with a white stripe over the eve (Hypocnemis leucophrys\*). Every morning and evening we heard in the neighbouring forests the loud cry of a species of "Aracua" (Ortalis) and the singular sound of the Trumpeter-bird (Psophia). Native hunters assured me that it was the "Jacamim de costas cinzentas," i.e. Psophia crepitans, represented in Pará by the species with brownish wings (P. obscura) +.

The next day we were again hunting in the vicinity of "Igarapé de Hollanda." Besides the white-breasted

\* A specimen of this has been identified for me by Mr. Sclater, and I seize this opportunity to observe that I am much indebted to this ornithologist for constant help in determination and verification of materials and collections made in Brazil.—E. A. G.

† [Dr. Sharpe (B. M. C. xxxiii. p. 281) has united this species to Ps. viridis, but I am by no means convinced that this is correct.— P L. S.]

## Results of a Visit to South Guyana.

Tucáno, Tityra cayana, and Monasa nigra, which we noted frequently, we met everywhere the "Cri-cri-ó" (Lathria cineracea), a bird very well known to us as one of the most striking figures in the wet "igapó-forests" of Pará and Lower Amazonia. Its indigenous name is onomatopoetic. but its strident cry will be better given by the syllables  $h\bar{u}$ - $h\bar{u}$ qui-quiu ! We saw also different smaller Pipridæ (Chiromachæris and Pipra), a Bucco of median size (it seemed to be B. tamatia) on a dry branch, and flights of the common Pipira of Pará (Rhamphocælus jacapa). We shot an adult individual of Ictinia plumbea, and several "Tangurú-pará" (Monasa nigra), in despite of the Amazonian legend, which declares this bird to be enchanted and warns one not to kill it, because, if the hunter does so, he will be unfortunate and probably burst his gun. Another most interesting Ant-Thrush was obtained, never met by us in Pará (Murmeciza pelzelni), a dark chocolate-brown Formicarian, with black throat and breast, bordered with white, and two rows of clear fulvous spots on the wing-coverts. This very beautiful bird was found near the ground in one of the most obscure and entangled places of the forest.

On some orange-trees in the gardens we observed the magnificent *Cæreba*, not quite blue yet at this time. My Pará bird-hunter, who accompanied me on this excursion, brought me on the same evening an agreeable surprise in the shape of a specimen of *Falco rufigularis*<sup>\*</sup>, the celebrated "Canaré" of the Amazonian people, who attribute to this very elegant and rapid Falcon several astonishing qualities, to which I may refer at another time.

Returning the next day to the same locality, I made all possible efforts to obtain an example of *Ara hyacinthina*, but again without success, because these intelligent birds, though their cries are awful when they are alone and unobserved, keep perfectly quiet when opening hard nuts on some gigantic tree. On the other hand, I was somewhat indemnified by having the opportunity of witnessing the

\* [F. albigularis, Sharpe, B. M. C. i. p. 401. But cf. Gurney, Ibis, 1882, p. 159, on this name.-P. L. S.]

graceful play of Chiromachæris gutturosa. This dancing is almost the same as that of Chiroxiphia caudata, which I have already observed and described. Along the river I also saw a few specimens of the Common Vulture, Cathartes fætens. I was very much pleased to hear nearly every morning and evening the song of the "Urú" (Odontophorus auganensis), the Amazonian Partridge, represented in Southern Brazil by O. dentatus, called "Capocira." The son of one of our neighbours brought home from a hunting-trip a specimen of the "Aracua" (Ortalis motmot), and one of a large Tinamus, designated by the natives "Inhambu-serra," and by my Pará hunter as "Inhambú-toró. In general aspect and the serrated scales of the posterior face of the tarsus it resembled T. solitarius, and I do not doubt that the specimen belonged to this species ; unfortunately the specimens were in too bad a state for skinning.

Every night we heard Goatsuckers around the village; the cry was that of *Nyctidromus guyanensis*.

The 17th and 18th October were dedicated to an exploration of the "Lago do Tralhoto," a lake indicated on all geographical maps, but, as regards its exact situation and extent, unknown even to the inhabitants of Counany. I do not intend to enter on a detailed description of the painful journey there through the forests and the savannas, as from an ornithological standpoint there would be very little to say about it. After an awful march of more than eight hours on bad paths and through savannas literally glowing with the hot sun of Guyana, we arrived at the mysterious lake, and, though very tired, we could not resist an immediate examination of this wonderful freshwater-basin. It is a true Eldorado for a hunter. I have never met with a spot in which the animals showed such a complete absence of the fear of mankind, such a truly paradisiacal state, as here on the borders of this unknown forest-lake, which is probably only the most southern of a series of similar lakes distributed over the unexplored region between the mouths of the rivers Counany and Cassiparé. The blue Aráras perched every moment in flights of from four to six individuals on

the majestic mirity-palms on the opposite border. We saw them breeding in holes in these high stems, the breeding bird being readily detected from afar by its enormous tail. for which the hole naturally does not offer sufficient room. A large number of Parrots and Parraquets were also breeding in similar places, the former, like the Aráras, in the hollows of the palm-stems, the latter mostly in burrows in the whiteants' nests. Storks, Herons, Kingfishers, and Cormorants enlivened the vegetation in a wonderful and surprising manner. Besides these aquatic birds, there were an incredible number of Hoatzins, Pigeons, and smaller birds of different kinds, while the Howlers and Squirrel-monkeys looked at our canoes with astonishment. In less than an hour we had a famous collection, and it was by no means easy to select what ought to be saved for science, and what could be delivered up to the cook. For the first purpose I chose, after some reflection, five specimens of Agamia agami, a magnificent Heron closely allied to our European Ardea purpurea, but even more richly coloured, and especially remarkable for its wonderful neck-feathers and its enormously long bill. We had among the specimens of this species three adult males, one female, and one young male -all shot in a quarter of an hour ! I selected also two fine individuals of Plotus anhinga, which showed interesting changes of plumage, some of Phalacrocorax brasilianus, and two or three of Galbula viridis, which I found perched in confidence near the primitive cottage of a pirarucú-fisherman. Several of the blue Aráras and various good aquatic birds had been stolen by the alligators, which inhabited the idyllic lake in enormous numbers. Till very late in the night all our people who were able to aid in the taxidermic service were fully occupied. As a certain number of skins remained unfinished, we made an experiment with salicylic acid applied on the fleshy parts of wings and legs, and it may be said with excellent results. All these skins arrived perfectly sound the next day in Counany, and were finished at leisure on the 19th and 20th October.

Striking is the difference in the cry of *Rhamphastos erythro*rhynchus compared with that of *R. ariel* and *R. discolorus*. It is particularly soft, nearly melodious, and may be tolerably interpreted by the syllables *tiu-tiu-fü-fü-fü-fü*. The Whitebreasted Tucáno is confined to river-borders and wet "igapóforests"; in localities far from water you will not meet with it. *Monasa nigra*, thè "Tangurú-pará," sings *ho-tiü*, *ho-tiü* continuously.

The 21st and 22nd October were employed on an exploration of the upper course of the river Counany. It was an instructive and successful canoe-journey, which left on us a deep impression of the richness of flora and fauna of this district, as well as of the beauty of the landscape. The water here, instead of being loamy and dirty, becomes clear and transparent; instead of floating imperceptibly along, it jumps gaily over the numerous cascades formed by granitic barriers which intercept the bed of the river, and, as we advance, form more and more serious obstacles to free navigation. An infinity of pretty freshwater fishes, such as "matupirýs" and "acarás," can be distinguished swimming around and beneath the boat, and the majestic forest vegetation of both shores echoes with the voices of interesting, beautiful, and rare birds. Here we met with several Yellowheaded Vultures (Cathartes urubitinga) and with many species of larger and smaller diurnal birds of prev, such as Ictinia and other Falcons. On some of the gigantic trees (such as "Sumaúmas") we observed charming societies of Tucános (Rhamphastos vitellinus prevailing here over the white-breasted R. erythrorhynchus), Parrots (such as Chrysotis farinosa, the "Molciro," which was very frequent), Ostinons, and Pigeons of different species, sometimes associated with smaller or larger families of howling monkeys. Of Ostinops we noted a flight of 30, 40, and more individuals. Here, also, we had again many occasions to verify the intelligence of these Cassicine birds in choosing for their colonies of hanging nests the extremities of branches vigorously defended by strong colonies of wasps. In Brazil, as well as in Guyana, the inhabitants state that these birds, when attacked, fly intentionally against the wasps' nest, in order to direct the irritation of their allies upon the common

enemy, be it man or some carnivorous animal. Ostinops, when in society and in good humour, sometimes utters a most striking song, comparable only to the ringing of the goat-bells heard in the Alps of Switzerland. Blue Aráras were often seen flying high over the river from one shore to the other.

Along the river we noted among the water-birds a small Tringa, the same as was mentioned before, generally in companies of from two to four individuals, rising, on the approach of our cance, with a melodious fi-fi, fi-fi. Now a White Heron (A. candidissima), then a Blue Heron (A. cærulea), and from time to time a Scarlet Ibis (Ibis rubra) is seen. Constant companions were the Kingfishers, the large Ceryle torquata, generally perched on some overhanging branch, being the first to give the sign of alarm with his strident cry, which is like kreh, kreh, kreh, &c. I was much pleased to note here, besides the four species of Ceryle spread all over Brazil, a fifth species, although not very common, the Ceryle inda (sive bicolor).

Exceedingly frequent we found the two Swallows already mentioned—*Tachycineta albiventris* and *Atticora fasciata*. Sometimes individuals of both were perceived at the same time, but more often we saw one, and a moment after only the other species. As it seemed to me, *Atticora fasciata* kept to special localities, where there were a somewhat elevated shore and high earthbanks. At such places the banks were full of small holes, which were probably made by the Kingfishers and Shore-Swallows\*.

After a day's navigation up stream we arrived on the "Cachoeira Rasa," a granitic barrier of successive terraces extending over near a kilomètre, and therefore a serious obstacle for a canoe. Here is the last human residence, and the limit between the known and the unexplored course of the Upper Counany. Not being sufficiently equipped for an exploration beyond this cascade, I had to remain here, and

<sup>\*</sup> I am convinced that *Atticora fasciata* was breeding there and at that season. See Sharpe and Wyatt, 'Monograph of the Hirundinida,' p. 495.

was obliged to return the next day. But this very interesting locality furnished us on the same evening with several birds new to us. Very numerous up here were two Pigeons -the magnificent Columba speciosa, perhaps the brightest of the South-American species, and Columba rufina. Descending the river next morning I was much pleased with a flight of Deroptyus accipitrinus, the Collar-Parrot, called "Anaca," one of the most aberrant of the New-World psittacine forms, reminding one of an Australian Cockatoo. Everything is aberrapt in this bird, even its cry, which is a loud kía-kía-güi-güi-güi, and different from that of any other neotropical Parrot. I believe it is the first time that this species has been noted in the South-Guyana coast-region. At another cascade (a really remarkable place for Podostomaceæ. especially for the splendid Mourera fluviatilis) we collected examples of Eurypyga helias and Aramus scolopaceus.

Leaving our northern headquarters in Counaný on the 24th October, the steamer 'Adjudante' brought us to Amapá, after a somewhat troublesome course along the coast. In Amapá we spent another fortnight. My remembrances of this unhappy and pestilential marsh-region are exceedingly disagreeable. Bad fevers struck down my companions one by one; out of six I had the luck to be the only one who escaped untouched. Though most of them recovered themselves slowly towards the end of our residence, I was seriously hindered in the execution of our programme, and my zoological researches suffered also. I regret it the more, as the region is interesting from the ornithological standpoint, and may be called very rich as regards the water-birds.

The village of Amapá (as will be seen by the map, p. 151) is distant from the coast between 70 and 80 kilomètres, and is situated on the right bank of the "Igarapé do Campo," an affluent of the "Amapá pequeno." The actual village, erected, as we discovered, on an old Indian burial-place, suffered very much from the recent armed invasion of some French soldiers and the subsequent massacre on the 15th May, 1895. On the front of it is a river, certainly 30 m. wide, but almost impracticable, even for cances, during greater part of the day; on both sides, right and left, lies interminable "siriúba"-forest mixed with "anhinga,"—hot, marshy, and inhabited by myriads of furiously biting mosquitoes. Behind the village is dry forest for a kilomètre or two, where reasonable collecting should be possible if mosquitoes were less numerous, and if the paths were not sown with spring-guns armed for the destruction of *entías* and *pacas*. The nearer part of this forest is somewhat lighter, and has the much promising name of "bosque."

Almost every morning and evening I visited the "bosque" and the neighbouring parts of the high forest. I observed regularly and collected there examples of *Ibycter chimachima*, Asturina magnirostris, Chrysotis amazonica, Brotogerys virescens, Bucco tamatia, Galbula viridis, Ceophlœus lineatus, Chrusoptilus punctigula, Celeus flavus, Dendrobates sp. ind., Saltator superciliaris, Turdus albiventris, T. gymnophthalmus, Thruophilus leucotis, Thampophilus doliatus, Attila thampophiloides, Formicivora grisea, and Gluphorhynchus cuneatus. I noticed also the delicate Polioptila buffoni, Lathria cineracea, and a vellow-breasted Trogon, without getting good skins of them. Among the favourite spoils of native bird-hunters I often noted Rhamphastos erythrorhynchus and Ortalida Every night, especially when there was moonmotmot. light, the cry of Nyctidromus guyanensis was heard on the roads around the village, and that of Nyctibius grandis in the siriubal. Once I heard of some specimens of Vanellus cayennensis being in a plantation very near the village. The only species entirely new for me alive was Turdus gumnophthalmus. I had never before seen the "Bare-eyed Thrush," and I doubt whether it has been observed in any region southward of Trinidad and Cavenne. The naked space around the eye is yellow in life; it is impossible to confound this well-marked Thrush with any other neotropical species.

On the orange-trees in the village I saw and heard every moment, even during the hottest hours of the day, a number of common birds also met under similar circumstances in Pará, such as *Tityra cayana*, *Todirostrum maculatum*, *Myiodynastes audax*, *Empidonomus varius*, *Myopatis semifusca*,

Myozetetes sulphureus, M. similis, Tanagra episcopus, and Rhamphocælus jacapa. On the assaby-paims, banana-trees, and siriúbas along the river sat Spermophila albiqularis, emitting its melodious fi-fi-fi; one or more individuals of Ostinops decumanus; and flights of always busy and chattering Cassicus persicus, which had a numerous colony on a high siriúba-tree near the harbour. From time to time I saw flocks of Brotogerus virescens, the very sociable "Periquito estrella," so common all over Lower Amazonia and Southern Guyana. The bird, however, which most interested me was the Pachunus brachuurus, a short-tailed and corpulent green Parrot, of which a flight of some 20 individuals perched (the 30th October) on a siriúba. Unfortunately I got one specimen only of this species, which is not found, as I know well, after nearly three years' residence, in the vicinity of Pará.

In the neighbouring "anhinga," in the morning and evening, often was heard the song of the "Saraeúra"—an *Aramides*, probably *A. chiricote*—and during the hours of low water there were always walking in the mud of both sides of the river White Herons and Scarlet Ibises, besides the common "Urubú" Vultures (*Cathartes fætens*). Among the Swallows we observed *Progne chalybæa* and *Progne tapera* in the village, and *Tachycineta albiventris* on the river.

A highly interesting excursion was made on the 4th and 5th November to the "Lago Grande do Amapá" (see map, p. 151). Leaving the village of Amapá in the morning on board of a large boat, transformed *ad hoc* into an Amazonian "igarité," we entered the "Rio dos Bagres" and crossed the large lake during the afternoon of the day. Scarlet Ibises, Cormorants (*Phalacrocorax brasiliensis*), Snake-neeks (*Plotus anhinga*), and Herons, white and blue, were numerous along the river. Remarkably frequent were two small water-birds, forming clouds of thousands of individuals. One of these was a small Sandpiper (I think *Tringa minutilla*), the other a small but very pretty Shore-Plover (certainly *Ægialitis semipalmata*). It will give some idea of their multitudes to say that we obtained 182 individuals of these two species as result of only seven shots, besides the number of wounded that escaped capture. Sandpipers, Plovers, and milk were our only articles of diet during these two days.

Crossing the lake, which is excessively shallow and studded with newly-made islands of marsh-grass, we were surprised with the incredible number of wild Ducks (*Dendrocygna* discolor\*, D. viduata, and Cairina moschata) which we saw. White Herons were here in swarms, and Blue Herons, Spoonbills (*Platalea ajaja*), and "Magoarýs" (Ardea cocoi) were disturbed every moment. Besides these arose flights of from 20 to 40 individuals of the Scarlet Ibis in every sort of plumage, the adult and quite red ones being usually separate from the younger and dark-coloured.

The borders of the lake were occupied with a large girdle of water-lilies (*Nymphæa rudgeana*), inhabited by many families of *Parra jacana*. It was not easy to get our boat through this girdle of leaves, and hours of hard rowing and all our united efforts were necessary to make a direct distance of a few kilomètres.

It was nearly evening when we reached the cattle-settlement of one of our guides and boatmen, two primitive cottages covered with palm-tree-leaves. We were struck with the resemblance of the landscape around this "sitio" with that of the campos-region in the eastern and northern part of the island of Marajó, and with the physical characters of the interior of Mexiana, as described by Wallace. The bird-life offered numerous similarities of parentage. Thousands of Ducks flew at different heights over our heads, endeavouring to regain the reedy meadows on the borders of the lake. Alternating with the Ducks passed flights of the large "Passarão" (*Tantalus loculator*), and Ibises and Spoonbills, these two generally observing a cuneiform arrangement. The Musky Duck (*Cairina moschata*) is common in this

\* I have materials for a special note on the nesting of D. discolor, and I believe that their publication may be of interest to ornithologists, as the specific distinctness of D. discolor and D. autumnalis will become certain only on the elucidation of the whole life-history of both species.—E. A. G.

region; during the moulting-season ("desaza") even adult specimens are frequently captured by the "vaquieros," who like to employ their dogs for this purpose. In the same manner they obtain during the breeding-period lots of young *Dendrocygmu* and *Querquedula brasiliensis*, called "Ananahy," as in Pará and Marajó. I was informed that the "Flamingo" (*Phænicopterus ignipalliatus*) is frequent in the marsh- and lake-region of South Guyana, especially along the Cabo do Norte, between the mouth of Araguarý and Maracá, and that it breeds there; but during my residence at Amapá I did not observe a single individual.

In the reedy borders I obtained Donacobius atricapillus, here called "Batuquíra," several specimens of Himantopus mexicanus, Totanus melanoleucus, T. flavipes, and Charadrius virginianus, welcome water-birds for our collection. Gulls were not very numerous or represented by many different species, but I brought from this locality one specimen of Sterna aranea.

In the low campos-grass behind the "sitio" I was much pleased to meet with the splendid Leistes guyanensis, with its bright crimson breast-cloth; it is called "Tém-tém do Espirito santo" or "Policia Ingleza," alike, over all Lower Amazonia. In the same place I observed the common "Vira-bosta" (Molothrus atro-nitens), and the elegant and charming campos Pigeon, Uropelia campestris. Zenaida maculosa was numerous on the spare trees, which are low and flat-shaped, as is the rule in campos-regions. We observed also Chamæpelia talpacoti. Leptoptila rufaxilla, Arundinicola leucocephala. Gymnomystax melanicterus, and a diurnal bird of prey, with white abdomen and dark head, which was, I suppose, Tachytriorchis albicaudatus. The "Lago Grande do Amapá" is certainly a splendid region for ornithology, but the difficulties of life there are enormous. Returning from the lake the next day, I shot, near the mouth of the lake on the "Rio dos Bagres," two individuals of Agelæus icterocephalus, a fine Icterid with black body and yellow head, which until now I had met with only on the Atlantic side of Marajó, but nowhere around Pará.

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Aráras I saw in Amapá only once; a couple flew over the village on the morning of 7th November. But the number of the Amazonian Parrots (Chrysotis amazonica) which passed twice every day over the village exceeds belief. In the morning they came from the siriúba-forests on the mouth of the Amapá River. Hungry as they were, I always saw some small groups settle on the high trees in the before-mentioned "bosque." But they were certainly in search of the fruittrees scattered over the forests on the upper course of the river. All the individuals I shot had, at that time, the crop filled with a bluish, pulpy mass, which we easily recognized as formed by the pericarp of the Umiry-cherries (Humirium floribundum). In the evening they returned in the contrary direction, in search of sleeping-quarters in the siriúba. Between 5 and 6 o'clock in the evening conversation was sometimes impossible in the village until the clouds of Parrots had passed out of sight. If one Parrot is able to produce an infernal clamour, think of the noise produced by an uninterrupted chain of hundreds and thousands of these criers !

Our collection, and these pages, which are written after a study of it and of my field-notes, may give a tolerable idea of the ornithological features of this part of Southern Guyana, which had never before been visited by any naturalist. From Counany I brought home to Pará 50 skins of birds, representing 30 species; from Amapá 63 bird-skins, representing 42 species—making a total number of 113 individuals and 72 species.

But I cannot look on this result, relatively successful, without profound grief. The young man who had the principal share in making it—Max Tauner, my countryman and the taxidermist of the Pará Museum—died from the effects of the Amapá fever on the 14th of November, 1895, on board our steamer 'Adjudante,' when we were just in sight of the eity of Pará.

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